

**ABSTRACT**

A substrate 18, a cathode 20 and an anode 22 are stored in a space demarcated by a casing 10, and the space is evacuated. The cathode 20 and the anode 22 are provided on the same surface of a substrate 18 having electric insulation, and have a comb-tooth shape so as to be mutually engaged. Therefore, the area of the part in which the cathode 20 and the anode 22 approach each other becomes larger, and thereby photoelectrons discharged from the cathode 20 through the incidence of ultraviolet rays are transmitted in the vacuum, and are favorably collected in the anode 22.